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EXAMINER				
NIGH, JAMES D				
ART UNIT		PAPER NUMBER		
3685				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/579,558

Applicant(s)

OHMORI ET AL.

Examiner

JAMES D. NIGH

Art Unit

3685

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This communication is in response to amendments and remarks filed on 20 October 2009.

Claim Status

2. Claims 1-13 were previously cancelled. Claims 14-18 and 20-21 have been amended. Claims 14-21 are currently pending and are presented for examination on the merits.

Response to Amendment

3. Amended claim 14 has added the additional recitation regarding license information being stored. For example the amended language regarding the tamper resistance module now recites "a tamper resistance module which encrypts at least the license information, among the license information and a correspondence table for managing an update history of the license information, and which stores the encrypted license information into the storage unit". However per MPEP § 2114 in a claim directed to structure functional language does not distinguish the claimed invention from the prior art. Therefore the language "which encrypts at least the license information, among the license information and a correspondence table for managing an update history of the license information, and which stores the encrypted license information into the storage unit" which recites only function and not additional structure is not entitled to patentable weight "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from

the prior art in terms of structure rather than function" *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

4. Similarly in the limitation "a digital signature management unit configured to (i) generate a hash value of the encrypted license information before the encrypted license information is stored into the storage unit, and store the generated hash value into a built-in memory, and (ii) read the encrypted license information stored in the storage unit, generate a hash value of the read encrypted license information, and compare the hash value stored in the built-in memory with the generated hash value of the read encrypted license information, with a result of the comparison being used to verify validity of the read encrypted license information, the validity indicating that the encrypted license information has not been tampered with" the language "configured to ... has not been tampered with" is simply reciting function and not additional structure. Also in the remainder of claim 14 the language following the recitations regarding the "encrypting and decrypting unit:" and "control unit" beginning with the words "configured to" is simply reciting function and not additional structure. As the language is reciting function and not a structural limitation per MPEP § 2114 the recited function does not distinguish the claimed structure from the prior art.

5. Claim 14 now recites "wherein the decrypted content key outputted by the control unit is received and used for decrypting the digital content by a content decrypting unit that is connected to the license information management apparatus". Since this newly added language is simply reciting intended use, it is not entitled to patentable weight.

See MPEP § 2106 II C and MPEP § 2111.04 regarding “wherein” language and MPEP § 2114 regarding functional language.

6. Claim 14 has been modified to indicate that the encrypted information is “license information”. As the status information of Hori is license status information (0218, “When reproduction is allowed, the license status flag is set to “01h” (step S648)” in the broadest reasonable interpretation it is license information.

7. Claim 14 recites “with a result of the comparison being used to verify validity of the read encrypted license information, the validity indicating that the encrypted license information has not been tampered with” which is simply reciting the intended use of the comparison. “While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone”, MPEP 2114; *In re Swineheart*, 169 USPQ 226; *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997)

Response to Arguments

8. Applicant’s argument with regard to the 35 U.S.C. § 101 rejection of claims 20 and 21 has been fully considered and is persuasive. Accordingly the rejection will be withdrawn.

9. Applicant’s argument with regard to the 35 U.S.C. § 112, 1st paragraph rejection of claims 14-21 has been fully considered but is not persuasive. Paragraph 0063 of Applicant’s disclosure recites that “Further, the total control unit 213 updates details of LT including the content reproduction condition information 511a and instructs the encryption/decryption unit 114 to re-encrypt the updated LT using the TRM unique key

(S206). Furthermore, the total control unit 213 increments the number of update times (S603) and instructs the digital signature management unit 214 to apply the digital signature to the concatenated information (S604). It then instructs the encryption/decryption unit 114 and the digital signature management unit 214 so as to write the encrypted LT and the concatenated information to which the digital signature is applied (S605)". Thus it is only apparent that the LT is encrypted and that the digital signature is applied to the concatenated information. Paragraph 0058 reinforces this "The digital signature management unit 214, based on an instruction from the total control unit 213, applies a digital signature to the concatenated information, stores into the secure flash unit 120, reads out the concatenated information stored in the secure flash unit 120 and verifies the validity. Here, conventional technology is used for a method of applying the digital signature and applying it". Paragraph 0062 recites "First, the total control unit 2,13, similar to the case in the first embodiment, verifies the existence of the license ticket corresponding to the content according to the reproduction instruction (S203: Yes), when receiving information concerning the reproduction of the content from the content decryption unit 520 (S206: Yes), reads out the concatenated information to which the digital signature is applied, being stored in the secure flash unit 120, and instructs the digital signature management unit 214 to verify the validity using the TRM unique key (S601)". Thus Examiner does not see where the claimed "encrypted license information" is hashed as recited in the claim but only the concatenated information, which is not disclosed as being encrypted. Therefore this constitutes new matter.

10. Applicant's argument with regard to the 35 U.S.C. § 112, 2nd paragraph rejection of claims 14-21 has been fully considered and is persuasive. Accordingly the rejection will be withdrawn.

11. Applicant's argument with regard to the 35 U.S.C. § 103 (a) rejections of claims 14-21 has been fully considered but is moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 14-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

14. Claim 14 recites "a digital signature management unit configured to (i) generate a hash value of the encrypted license information before the encrypted license information is stored into the storage unit, and store generated hash value into a built-in memory. Claims 20 and 21 recite similar language. Paragraph 0063 of Applicant's disclosure recites that "Further, the total control unit 213 updates details of LT including the content reproduction condition information 511a and instructs the encryption/decryption unit 114 to re-encrypt the updated LT using the TRM unique key (S206). Furthermore, the total control unit 213 increments the number of update times (S603) and instructs the digital

signature management unit 214 to apply the digital signature to the concatenated information (S604). It then instructs the encryption/decryption unit 114 and the digital signature management unit 214 so as to write the encrypted LT and the concatenated information to which the digital signature is applied (S605)". Thus it is only apparent that the LT is encrypted and that the digital signature is applied to the concatenated information, which is not recited as being encrypted. Paragraph 0058 reinforces this "The digital signature management unit 214, based on an instruction from the total control unit 213, applies a digital signature to the concatenated information, stores into the secure flash unit 120, reads out the concatenated information stored in the secure flash unit 120 and verifies the validity. Here, conventional technology is used for a method of applying the digital signature and applying it". Paragraph 0062 recites "First, the total control unit 2,13, similar to the case in the first embodiment, verifies the existence of the license ticket corresponding to the content according to the reproduction instruction (S203: Yes), when receiving information concerning the reproduction of the content from the content decryption unit 520 (S206: Yes), reads out the concatenated information to which the digital signature is applied, being stored in the secure flash unit 120, and instructs the digital signature management unit 214 to verify the validity using the TRM unique key (S601)". Thus Examiner does not see where the claimed "encrypted license information" is hashed as recited in the claim but only the concatenated information, which is not disclosed as being encrypted. Therefore this constitutes new matter. For purposes of claim interpretation the claim will

be interpreted as generating a hash value and comparing the generated hash value with a stored hash value.

15. Claims 15-19 are also rejected as being dependent upon claim 14.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hori et al. (U.S. Patent PG Publication 2002/0184154, now U.S. Patent 7,340,055, hereinafter referred to as Hori) in view of Ginter et al. (U.S. Patent 5,892,900, hereinafter referred to as Ginter).**

18. .As per claims 14, 20 and 21

Hori discloses encrypting the license information and storing the encrypted license information in the storage unit (0136, 0177, 0199, 0204, 0239)

Hori discloses reading the encrypted license information from the storage unit and decrypting the read encrypted license information (Figure 12, 0100, 0135, 0176, 0238)

Hori discloses generating a hash value (0222)

Hori discloses comparing the hash value stored in memory with the generated hash value (0227)

Hori discloses decrypting the encrypted content key included in the license information (Figure 20, Figure 23, 0166, 0175, 0221, 0227, 0228)

Hori discloses outputting the decrypted content key (0074, 0095)

Hori discloses updating the content reproduction condition information included in the decrypted license information (0074, 0077)

Hori explicitly discloses storing in the storage unit (0085, 0086, 0102, 0114, 0256)

With regard to claim 14 the language "with a result of the comparison being used to verify validity of the read encrypted license information, the validity indicating that the encrypted license information has not been tampered with" is simply reciting the intended use of the comparison. "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone", MPEP 2114; *In re Swineheart*, 169 USPQ 226; *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997) although this is disclosed by Hori (0227).

The recitation "wherein the decrypted content key outputted by the control unit is received and used for decrypting the digital content by a content decrypting unit that is connected to the license information management apparatus" is a statement of intended use and is not entitled to patentable weight. See MPEP § 2106 II C and MPEP § 2111.04 regarding "wherein" language and MPEP § 2114 regarding functional language.

Hori does not explicitly recite a tamper resistant module with a built-in memory. Ginter teaches a tamper resistant module with a built-in memory (60:17-44, 64:16-65:16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory card and data distribution system of Hori with the trusted infrastructure of Ginter for the purpose of providing commercially secure, effective solutions for configurable, general purpose electronic commerce transaction distribution control systems.

19. As per claim 15

Hori discloses the limitations carried from claim 14 plus the following:

Hori discloses wherein the encrypting and decrypting unit is configured to encrypt each of a plurality of pieces of license information, and store each piece of encrypted license information in the storage unit (0049, 0093, 0095).

However as the claim is not adding any additional structural limitations it is not entitled to patentable weight. See MPEP § 2106 II C and MPEP § 2111.04 regarding "wherein" language and MPEP § 2114 regarding functional language.

20. As per claim 16

Hori discloses the limitations carried from claim 14 plus the following:

Hori does not explicitly disclose wherein the encrypting and decrypting unit is further configured to (i) encrypt the correspondence table and store the encrypted correspondence table in the storage unit; however as Hori teaches a correspondence table (0074, 0082, 0087, 0095, 0096, 0103, 0127-0128, 0131, 0169-0170, 0231-235),

an encryption unit (0015-0017) and a storage unit (0011-0018) a predictable result (*KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007)) of Hori would be to use the encryption unit to encrypt the correspondence table and store the result in the storage unit for the purpose of providing a data distribution system

Hori does not explicitly disclose a unit configured to read the stored correspondence table from the storage unit and decrypt the read correspondence table; however as Hori teaches a correspondence table (0074, 0082, 0087, 0095, 0096, 0103, 0127-0128, 0131, 0169-0170, 0231-235), an decryption unit (0015-0017) and a storage unit (0011-0018) therefore a predictable result (*KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007)) of Hori would be to read the stored correspondence table from the storage unit and use the decryption unit to decrypt the correspondence table for the purpose of providing a data distribution system

“the correspondence table being a table in which identification information identifying the license information is stored in association with information indicating an update history of the license information for each of a plurality of pieces of license information stored in the storage unit” is simply descriptive material and as the claimed data has no manipulative effect on any of the structure it is nonfunctional in nature and therefore is not entitled to any patentable weight “Where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability [T]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate” *In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983), *In re Ngai*, 70 USPQ2d

(Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01 II, "We conclude that when the prior art describes all of the claimed structural and functional relationships between descriptive material and the substrate, but the prior art describes a different descriptive material than the claim, then the claimed descriptive material is non-functional and will not constitute a sufficient difference from the prior art to establish patentability", *Ex parte Halligan*, 89 USPQ2d 1355 (Bd. Pat. App. & Int. 2008); however Hori teaches a correspondence table (0074, 0082, 0087, 0095, 0096, 0103, 0127-0128, 0131, 0169-0170, 0231-235).

21. As per claim 17

Hori discloses the limitations carried from claim 16 plus the following:

Hori discloses wherein corresponding information indicating the update history indicates the number of updates or a random number (0074)

Hori discloses wherein the control unit is further configured to update the corresponding information of the correspondence table indicating the number of updates or the random number when the license information is updated (0074) and cause the encrypting and decrypting unit to encrypt the updated correspondence table and to overwrite the encrypted correspondence table stored in the storage unit with the encrypted updated correspondence table so as to store the encrypted updated correspondence table into the storage unit (0171, 0204)

However as the claim is not adding any additional structural limitations it is not entitled to patentable weight. See MPEP § 2106 II C and MPEP § 2111.04 regarding "wherein" language and MPEP § 2114 regarding functional language.

22. As per claim 18

Hori does not explicitly disclose determining if license is new. However, Hori teaches a license information hold unit (0177, 0199, 0204, 0210) and specifically teaches checking to see if a status flag (0210) is set to FFh indicating that no transaction ID is present; therefore a predictable result (*KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007)) of Hori would be to query the license information hold unit to see if the status was set to FFh in which case it would be assumed that the content was new for the purpose of providing a data distribution system.

Hori discloses overwriting the encrypted license information stored in the storage unit with the new encrypted license information so as to store the encrypted license information into the storage unit (0171, 0204).

However as the claim is not adding any additional structural limitations it is not entitled to patentable weight. See MPEP § 2106 II C and MPEP § 2111.04 regarding "wherein" language and MPEP § 2114 regarding functional language.

23. As per claim 19

Hori explicitly discloses data management unit is an IC card (background (0007-0008), 0011, 0019, 0049-0053, 0056, 0058, 0068-0070, 0072, 0074-0075, 0077-0080, 0086-0087, 0093-0094, 0098-0107, 0110, 0112, 0114, 0117-0126, 0129-0130, 0133-0134, 0141-0143, 0148, 0150-0156, 0161-0166, 0171-0175, 0181-

0182, 0187-0188, 0191, 0194-0198, 0208-0211, 0215, 0220, 0224, 0228, 0233-0234, 0237, 0243-0244, 0252, 0256-0258)

Hori explicitly discloses a data management unit having tamper resistance (0103-0106)

Hori does not explicitly disclose that the storage unit is flash memory. Ginter teaches flash memory (70:54-71:50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory card and data distribution system of Hori with the trusted infrastructure of Ginter for the purpose of providing commercially secure, effective solutions for configurable, general purpose electronic commerce transaction distribution control systems.

Please note:

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant(s) are reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See *e.g.* MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.]" and *In re Johnston*, 435 F.3d 1381, 77 USPQ2d

1788, 1790 (Fed. Cir. 2006) ("As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.").

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES D. NIGH whose telephone number is (571)270-5486. The examiner can normally be reached on Monday-Thursday 6:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt II can be reached on 571-272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES D NIGH/
Examiner, Art Unit 3685

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685